IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A vertical drawing method for producing a cylindrical glass body, said method comprising:

continuously feeding a glass cylinder to a heating zone having a vertically oriented heating tube;

zonewise softening the glass cylinder;

drawing a glass strand from the softened glass cylinder; and

cutting the glass strand to size to obtain the cylindrical glass body; and

an adjusting operation that comprises sensing a value for a first xy-position of a longitudinal cylinder axis of the glass cylinder or of a test glass cylinder in a first horizontal sensing plane, softening the glass cylinder or the test glass cylinder in the heating zone, with the longitudinal axis thereof extending through the heating tube and through the first xy-position in the first horizontal sensing plane, and drawing the glass cylinder or the test glass cylinder arranged in the first xy-position into a test glass strand, and carrying out the following steps once or repeatedly:

a) measuring an actual state of a radial circular or annular dimension of the test glass strand,

b) determining a deviation between the actual state and a desired state of the circular or annular dimension relative to a magnitude and position of said deviation relative to an inner wall of the heating tube during drawing,

c) calculating a corrected xy-position of the longitudinal axis on the basis of a correction factor and the magnitude and position of the deviation, said corrected xy position being such that heating of the glass cylinder extending through the heating tube with the longitudinal axis thereof in said corrected xy-position is improved,

d) repositioning the glass cylinder or the test glass cylinder in the heating tube such that the longitudinal cylinder axis extends at least in the first horizontal sensing plane in the corrected xy-position, and

e) drawing the glass cylinder or the test glass cylinder in the corrected xy-position to obtain a further test glass strand; and

wherein the test glass strand is tubular, and wherein the measurement of the actual state of radial circular or annular dimension of the test glass strand comprises measuring a wall thickness of the tubular test glass strand.

2. (Previously Presented) The method according to claim 1, wherein the sensing of the value for the first radial xy-position comprises producing an optical image of the glass cylinder in the first sensing plane and at least part of the heating tube or a calibration body in stationary relation with the heating tube, and evaluating the optical image.

3. (Canceled)

4. (Canceled)

5. (Previously Presented) The method according to claim 1, wherein the tubular test glass strand is drawn with an outer diameter of not more than 50 mm.

6. (Previously Presented) The method according to claim 1, wherein the measurement of the actual state of radial circular or annular dimension of the test glass strand is carried out during drawing, wherein the circular or annular dimension is determined at a plurality of measurement points distributed over a circumference of the test glass strand.

7. (Previously Presented) The method according to claim 1, wherein the measurement of the actual state of radial circular or annular dimension of the test glass strand is carried out on pieces of the test glass strand that have been cut to length, using a stationary wall thickness measuring device.

8. (Previously Presented) The method according to claim 1, wherein in a tubular test glass strand, the first xy-position and the corrected xy-position are separated by a distance A, as defined by the following dimensioning rule:

$$A = K \times \text{wall lopsidedness}$$

where K is a correction factor ranging between 5 and 40 and the wall lopsidedness is determined as a differential amount between a maximum value and a minimum value of

the wall thickness.

9. (Previously Presented) The method according to claim 1, wherein a value is determined for the first xy-position of the longitudinal cylinder axis of the glass cylinder in a second horizontal sensing plane.

10. (Previously Presented) The method according to claim 1, wherein the glass cylinder in the heating tube is moved by computer-controlled transportation of the glass cylinder to the corrected xy-position.

11. (Previously Presented) The method according to claim 1, wherein the glass cylinder is of test material.

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Previously Presented) The method according to claim 1, wherein the cylindrical glass body is quartz glass.

19. (Previously Presented) The method according to claim 1, wherein the tubular test glass strand is drawn with an outer diameter between 10 mm and 20 mm.

20. (Previously Presented) A method for drawing a glass body from a glass cylinder, said method comprising:

positioning the glass cylinder in a vertically oriented heating tube;

feeding said glass cylinder continuously to a heating zone in the heating tube and softening the glass cylinder therein;

drawing a glass strand from the softened glass cylinder; and

cutting the glass strand to size to obtain the cylindrical glass body;

said positioning of the glass cylinder comprising

drawing a test strand from the cylinder or from a test cylinder supported with a longitudinal axis thereof extending vertically through an xy-position in a generally horizontal sensing plane, the cylinder or test cylinder being softened in the heating zone,

measuring a geometrical attribute of the test strand;

deriving a deviation of the geometrical attribute from a desired value of said geometrical attribute,

deriving a corrected xy-position from said deviation, such that the glass cylinder extending through the heating tube with the longitudinal axis thereof in said corrected xy-position is heating of improved, and

positioning the cylinder or the test cylinder so that the longitudinal axis thereof extends through the corrected xy-position,

wherein the geometrical attribute includes a data value indicative of lopsidedness and a data value indicative of the orientation of lopsidedness relative to the heating tube, and

wherein the test strand is tubular, and the data value indicative of lopsidedness is derived from a plurality of measurements of wall thicknesses of the tubular strand.

21. (Previously Presented) The method of claim 20, wherein the steps of drawing, measuring, deriving, and positioning are repeated to yield a second corrected xy-position to which the cylinder is moved.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The method of claim 20, wherein the xy-position is sensed by producing and evaluating an optical image of the glass cylinder in the horizontal sensing

plane, and said positioning of the cylinder is accomplished automatically by a processor responsive to the sensed xy-position and the geometrical property.

25. (new) A method of producing a cylindrical glass body, said method comprising:

continuously feeding a glass cylinder along a vertically oriented longitudinal axis of the glass cylinder to a heating zone having a vertically oriented heating tube;

softening the glass cylinder in the heating zone;

drawing a glass strand downward from the softened glass cylinder; and

cutting the glass strand to size to obtain the cylindrical glass body;

wherein the method further comprises performing an xy-position adjustment prior to said softening and drawing, said xy-position adjustment comprising

heating a test cylinder or a portion of the glass cylinder in the heating zone with a longitudinal axis thereof extending vertically through a first xy-position in a horizontal plane, drawing a test glass strand from the test cylinder or a portion of the glass cylinder, and measuring a geometrical property of the test strand indicative of a deviation of the test strand from a desired circular or annular state of the test strand, and

determining an adjusted xy-position from the first xy-position and the measured geometrical attribute such that when the glass cylinder extends through the heating zone with the longitudinal axis thereof extending through the xy-position, heating thereof is improved relative to the first xy-position.

26. (new) The method according to claim 25, wherein the first xy-position is detected by sensing the first xy-position in a horizontal sensing palne.

27. (new) The method of claim 26, wherein the wherein the geometrical attribute includes a data value indicative of lopsidedness and a data value indicative of the orientation of lopsidedness relative to the heating tube.

28. (new) The method of claim 25, wherein the geometrical attribute is a plurality of circular or annular dimensions of the test cylinder or the portion of the glass cylinder, wherein the circular or annular dimensions are determined at a plurality of respective measurement points distributed over a circumference of the test cylinder or the portion of the glass cylinder.

29. (new) The method of claim 25, wherein the cylindrical body is a hollow quartz glass cylinder.

30. (new) The method of claim 25, wherein the cylindrical body is a quartz glass rod.

31. (new) The method of claim 25 wherein a computer controls movement of the glass cylinder to the adjusted xy-position.

32. (new) The method of claim 25, wherein the test cylinder is used in the drawing from the first xy-position, and the test cylinder is of test material, and the glass cylinder is of quartz glass of a higher quality that the test material.

33. (new) The method according to claim 25, wherein the geometrical attribute includes detecting wall thickness of the test cylinder or the portion of the glass cylinder, and the first xy-position and the adjusted xy-position are separated by a distance Λ, as defined by the following equation:

$$\Lambda = K \times \text{wall lopsidedness}$$

wherein K is a correction factor ranging between 5 and 40, and the wall lopsidedness is determined as a differential amount between a maximum value and a minimum value of the wall thickness.